Castlemaine Naturalist

June 2020

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Monthly newsletter of the Castlemaine Field Naturalists Club Inc.



Eriochilus cucullatus, Parson's Bands Mt Alexander Golf Course Photo by Cathrine Harboe-Ree

June Webinar Presentation: "Solutions to Insect Armageddon"

Our meeting on Friday 12 June at 7.30 pm will again be online using Zoom. The guest speaker will be geneticist Professor Phil Batterham, of Melbourne University's School of Biosciences.



Globally, there is evidence that beneficial insect populations are in freefall, and insecticide use to control pest insects is a key suspect. So how can humans control the insects we don't want, while avoiding collateral damage to the insects that we need? "Solutions to Insect Armageddon" addresses this question, showcasing four fascinating stories of breakthrough research from the University of Melbourne driving new, non-chemical ways to control insects.

To attend this webinar, please email Peter Turner at munrodsl@iinet.net.au to receive details on how to register. Note: If you registered for the May webinar, you will receive an email with details on how to register for the June session.

"Wilderness Islands - Flora and fauna of the NZ Sub-Antarctic"

A report on the CFNC May webinar by Jenny Rolland

This was armchair travel indeed! Sitting back in the comfort of their own armchairs, refreshments on hand, on a cool autumn evening, about 35 CFNC members were taken on an exciting trip to the NZ Sub-Antarctic Islands, by Euan Moore via Zoom. This was the first monthly meeting since the COVID-19 shutdown, and the Zoom presentation gave a welcome (virtual) escape from the restrictions and a chance to see all those friendly faces again.

Euan gave an engrossing account of the 18-day "cruise" that we did last November with Heritage Expeditions. His detailed knowledge of the flora and fauna as well as

the history and geology of this fascinating wilderness accompanied his excellent wildlife photographs (examples shown here). For Euan, this was a trip he had dreamt of since his childhood in NZ, when travel there was only for researchers.

We sailed south from the southern tip of mainland NZ, Invercargill, to the islands of the Snares, Auckland. Macquarie, Campbell, Antipodes, Bounty and finally the Chathams (not actually Sub-Antarctic the group but equally fascinating), and then back to Dunedin. The islands are located south of New Zealand in the "Roaring Forties" and "Furious Fifties" latitudes. Our ship ("The



Carnley Harbour, Auckland Island

Spirit of Enderby" aka "Professor Khromov") comfortably held 50 passengers, an excellent team of guides (mainly birding) and a Russian crew.

The NZ Sub-Antarctic Islands are all World Heritage listed for their natural values. Landings were carefully regulated to avoid accidental introduction of invasive species. For some more pristine islands, landings were not permitted, but zodiac cruises still provided excellent close-up encounters with the wildlife along the shore and cliffs. The islands are havens for an abundance of wildlife. A striking feature of the birdlife is the high degree of endemism. Many species are found and breed only on one island or island group (e.g. the Erect Crested Penguin on the Antipodes and Bounty Islands, and the Royal Penguin on Macquarie Island), presenting an anxious goal for the twitchers seeking to enlarge their world bird list but also pointing to the vulnerability of these birds.



Erect-crested Penguin (*Eudyptes sclateri*), Antipodes Island

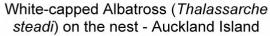


Royal Penguin (*Eudyptes schlegeli*), Macquarie Island

With the arrival of sealers, whalers and farmers in the early 1800s, the numbers of birds and mammals plummeted. Some species were pushed to extinction and others

hung on in low numbers on small islands. However, Euan described the impressive pest eradication programs that are bringing species back from the brink of extinction on many of these islands. The work on Macquarie Island is an outstanding example of what can be achieved with prolonged and thorough programs including the famous sniffer dogs that sniffed out the last rabbits and rodents from the rock crevices. Erosion gullies on the slopes are now slowly becoming revegetated and stabilising.







Southern Royal Albatross (*Diomedea epomophora*) - Enderby Island

The Sub-Antarctic Islands provide refuge for breeding colonies of albatross, penguins and other seabirds as well as a variety of marine mammals such as elephant seals, sea lions and fur seals. As we visited each of the islands, Euan described the local species we saw, pointing out their distinguishing features. They included nine different penguins, eleven albatross, eight shags (cormorants), three parrots and two flightless Teal. The distributions of these different species are often restricted to a single island or island group leading one to ponder how they had arrived and evolved.

Equally fascinating was the flora of the islands. Euan had long wished to see the amazing fields of megaherbs, with species often many times the size of similar ones back home and again with limited distributions. The fields are recovering well after removal of grazing feral animals.

At sea between island visits there were wonderful sightings of albatross and many



Macquarie Island herb field and healing erosion gullies

other seabirds but also several Sperm Whales, Orcas and some Beaked Whales, possibly Gray's. Finally, as the tail fin of a Sperm Whale slid slowly into the depths, viewers were jolted back into reality and the escape was over!

Bird Apps by Damian Kelly - A guide for the perplexed in the information age

Things have changed a lot from the days of recording everything in notebooks and maybe sharing a few sightings with friends. Collating and sharing information more broadly was difficult. As was getting an accurate identification of a new bird with very limited field guides and very little information on calls.

Today the choices can be overwhelming – a huge range of books, websites and smartphone Apps along with social media tools such as Facebook, Flickr, Instagram and such like.

There are two main aspects of all this electronic wizardry now:

- 1. Assistance with identification and learning about birds
- 2. Sharing of information to assist with conservation, land use and decision-making In some ways these two key purposes overlap.

1. Finding out about birds

Smartphone Bird Apps provide all the usual information from books – pictures, maps and text - but they also offer the ability to play bird calls which can be a great help in checking out birds (NB this should be used with caution in the field so as not to disturb the birds). Two popular Apps are the *Morcombe and Stewart Guide to Birds of Australia* (for iPhones/Apple) or *Michael Morcombe eGuide to Australian Birds* (for Android) which are extensions of the *Morcombe Field Guide to Australian Birds* book, and *Pizzey and Knight Birds of Australia*, an extension of the book of the same name. But there is a new kid on the block that offers useful extra features:

Merlin Bird ID by Cornell Lab of Ornithology

Unlike the other bird apps, Merlin has two very useful functions which provide assistance with identification - Bird ID and Photo ID.

a) Bird ID – a keying-out procedure where you answer questions and the possibilities are quickly narrowed down, making identification much easier. Questions include:

Location – you can use the GPS on your phone, enter a location manually or select from a map

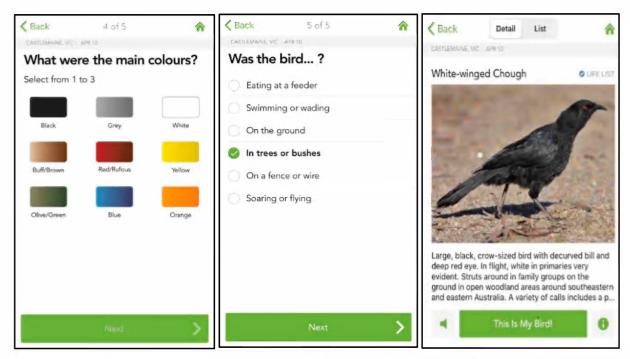
Date - helps with migratory species

Size – a comparison set of outlines are provided

Colour – selected from a palette

General – seen on fence or wire, trees, bushes and such like.

Although not a full taxonomic key, the keying-out process is simple and easy to use. It should help beginners get going, as well as assist more experienced birders to narrow down possibilities. What else can I say? It works as expected, is quite accurate and will quickly become more so as increasing numbers of people contribute. And more significantly it demonstrates the power of citizen science in producing very useful tools.



Some questions (and answer!) from the Merlin Bird ID pages

b) Photo ID – identification of a bird directly from a photo

You don't need to have the image on your phone. It works on images displayed on your camera back or a printout. Having tested the app on photos on my phone and camera back images I can say that the results are impressive, although not yet 100%. It correctly identified many species that I threw at it, such as robins, thornbills, a Barking Owl and even a mixed image of a Powerful Owl with downy chick.

If it is unable to identify an image it offers possibilities. You can contribute images and in this way it will gradually become more accurate, based on the input of a range of people.

2. **Sharing Information**

Birdata is maintained by Birdlife Australia

eBird is maintained by the Cornell Lab of Ornithology in the USA

In the field it is now easy to record your sightings. In addition there is in-built checking in both the above apps so that if you put in an unlikely species for the area, the app will prompt you to check things. Sightings are also moderated by experienced birders before being finally incorporated into the main database. Great for beginners.

Sharing data through eBird or Birdata has allowed the development of very detailed datasets of bird distribution, breeding and habitat preferences, as well as analyses of changes in populations over time, the impact of fire, weather events, re-vegetation projects and other land management processes. Birdata allows entry of bird sightings using standard survey techniques, e.g. 20 min 2 ha surveys, for reproducible data collection when monitoring bird populations. eBird also offers this provided you login via the link: https://ebird.org/australia/home - then the standard Birdata options appear under 'Other' and eBird sightings will end up in Birdata as well. Importantly, Birdata records are transferred to the Victorian Biodiversity Atlas (VBA) where they

can be accessed by government and other management authorities when making planning decisions.

Birders also use these databases to share information about the location of rare and unusual species and of course to maintain records of their birding. eBird is the preferred tool of *Twitchers* as it provides updates on your target species, Top 100 lists and such like for the more competitive or obsessed birders. It can be used to maintain your international list as well as your Australian list.

For beginners or those interested in finding a particular species, both resources provide excellent information about current locations of individual species.

The databases can be accessed by anyone and are free. They can be accessed via websites as well as via smartphone Apps:

http://birdata.birdlife.org.au https://ebird.org/australia/home

If you want to find out more about the birds of the area, both sites provide up-to-date information. You can use them without registering for an account, but it is a good idea to register so that you can contribute your own bird lists. Both sites have their strengths and weaknesses.

Note: Search results for a particular species will vary between these two sites as most people use only one site to record their data. However, a lot of my older eBird records have now been loaded into Birdata. Still, it is best to check both to be sure. The examples below have specified a date range of 2013-2018 to limit searches to the more recent records.

You can adjust these settings to suit. For example, some birds are migratory and will only be found in certain months. A good example is the Flame Robin which visits this area in Autumn-Winter. Other birds, such as many of the cuckoos, are summer visitors. It pays to check sites in advance if you are looking for a particular species.

eBird - https://ebird.org/australia/home

Explore a region:

Explore -> Explore a Region -> try: Victoria, Australia ->

This gives you all the checklists that have been entered for an area. Click on the map in the top right corner and drill down (double click on map and use the + button) to any area you are interested in until you see individual birding reports that appear as coloured markers. Click on a marker to get more information.

For individual species:

Explore -> Species -> enter species -> drill down to local area

You will see a Range Map. Click on the Large Map option (top right of map) to get specific sites. The map below (left) shows local sites for the Australian Owlet-nightjar in our area.

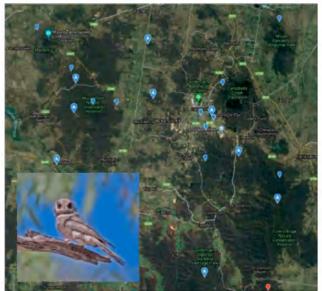
Birdata – birdata.birdlife.org.au

Explore a region:

Live Data Map on front page -> drill down by double-clicking

Find a species:

Explore -> Select species -> select data range -> drill down by double-clicking the map or use the + key to zoom down to the local area where you will see lots of dots representing survey points. The map below (right) shows a search for Hooded Robin in this region.



vamber Mild

Avoca

Agl

Be

Skiptor

eBird - Australian Owlet-nightjar distribution - Mt Alexander Shire

Birdata - Hooded Robin distribution - Mt Alexander Shire

Cane Needle Grass

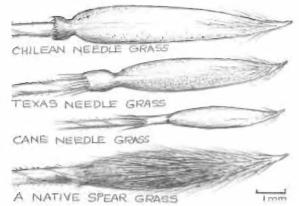
Margaret Panter

The President's Report in the April newsletter mentioned the Chilean Needle Grass at the Castlemaine Botanical Gardens. As well as Chilean NG (*Nassella neesiana*) there, there is also Texas NG (*N. leucotricha*) and, more significantly, Cane NG (*N. hyalina*) – on the national Alert List for Environmental Weeds.

Cane NG is by far the most numerous at the Gardens, and most of the over 100 volunteer hours by field naturalists and others this season were spent marking it, digging it out and bagging it.

Its seed and awn are much smaller than Chilean's and the corona (collar between the seed and awn) narrower, so that a hand lens is sometimes needed to see it. It also lacks the distinctive reddish-purple glumes (pair of husks in which the seed sits) of Chilean. These traits mean it can be more easily overlooked than Chilean and Texas NG.

More needle grass plants became apparent in the Gardens in March, after February rain. As working bees are a bit tricky to organise with the COVID19 shutdown, the council Gardens



Drawing by Margaret Panter

workers came to the rescue and have been digging them out.

Thanks to all the volunteers and council workers!

A Wolf in Spider's Clothing

Lynne Kelly

I have been sent a number of photographs of spider burrows found in Castlemaine over the last two weeks. I am delighted that they are the burrows of one of my favourite spiders, the Garden Wolf Spider (*Tasmanicosa godeffroyi* formerly *Lycosa godeffroyi*; family *Lycosidae*). Wolf spiders were so named because their method of hunting was thought, by someone with a great imagination, to resemble that of wolves.

The burrows have a circular entrance with the exact diameter of a large wolf spider abdomen, just over a centimetre. They have no door, but tend to be decorated with leaves and twigs held in place with silk. The burrows descend for 10 to 15 cm and will then travel for about the same length horizontally. The female will put a thin film of web across the entrance to the burrow after she has mated.

The females are up to 27 mm body length while the males are a few millimetres shorter, but with stronger markings. They are a timid spider. When I would sneak up close to photograph them, they always descended backwards into the burrow unless I approached very slowly and gently.

Wolf spiders are night hunters with reasonably good eyesight. The front two of their eight eyes are proportionately very large. Free-range hunters like the wolf spiders and jumping spiders use their eyesight, hence the need for larger eyes. In contrast, web-building spiders can usually only see light and



Male wolf spider in the house

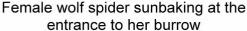
dark and shadows, detecting the world through the web and air movements with their extremely sensitive hairs. They have six or eight small eyes, depending on the family.

Tasmanicosa godeffroyi will sit at the entrance to the burrow at night waiting for prey to pass. During mating season, mostly spring and summer, the males will head off to find a female, and that is when they will enter your house. It is rare to see a female inside. Although their bite is not harmful to humans, it can be fatal for dogs and cats. However, as a timid spider, you rarely hear of a pet dying from a spider bite.

Once you have found a burrow, the best way to see the spider is to approach gently at night with a bright torch. The wolf spider eyes will reflect the light. You can attract them to the surface during the day with the grass stalk inserted into the burrow entrance. Wolf spiders love the sun. On a sunny day, if you approach the burrow very carefully from a few metres away, you can often see the spiders sunbaking at the entrance. The female will also sunbake her egg sac. Under the film of web across the entrance of the burrow, she will hold the spherical white or pale blue sac in her hind legs and slowly turn it in the sun.

If the female heads off hunting, she will carry the egg sac attached to her spinnerets at the end of her abdomen. Once the spiderlings have hatched, they will spend a week or two clinging to their mother's back. Although the first brood may be smaller, a mature wolf spider will carry enough babies to almost completely cover her. If any move onto her eyes she'll use the small appendages at the front, her pedipalps, to roughly brush them aside much as a windscreen wiper does on a car.







Mother with young on her back

One of the most exciting afternoons of my life was watching a group of spiderlings that I had been observing since I first sighted the egg sac being spun by their mother, who I had named Theresa. It was a hot day with a very light breeze. Most of the tiny creatures left Theresa's back and crawled up a small plant. They lifted their minute abdomens to the breeze and released a filament of silk. They let go of the plant and floated off into the distance. One landed about ten metres away. I marked her landing spot. I was able to follow her for the next two years. Like Theresa, she produced multiple broods of young.

The vast majority of the hundred or so spiderlings who ballooned that day would not have survived the next 24 hours. Those who did land safely and manage to avoid predators would have had a very small chance of reaching maturity without being eaten by one of those horrible creatures known as birds. Any burrow of a mature wolf spider is the home of a great survivor.

The mother of my spiderlings didn't last many more weeks. Her tragic ending was orchestrated by a White-winged Chough. Vale Theresa.

Photos by Lynne Kelly

Join Bush Blitz scientists on a virtual expedition!

Bush Blitz is Australia's largest nature discovery program, taking taxonomists to remote parts of the country to document plants and animals. This program is a partnership between the Australian Government, Parks Australia (through the Australian Biological Resources Study), BHP and Earthwatch Australia. There are an estimated 580,000–680,000 species in Australia but three quarters of this biodiversity is yet to be identified!

With expeditions currently on hold, a virtual expedition has been organised. The Backyard Species Discovery project enables us all to contribute to knowledge of Australian biodiversity while practicing social distancing.

For more information about the Bush Blitz virtual expedition, visit the Bush Blitz website https://bushblitz.org.au/introducing-an-expedition-for-everyone/.

Observations - Birds

Nigel Harland - Birds of Sutton Grange May 2020

Common Blackbird	Australian Raven	New Holland Honeyeater
Spotted Pardalote	Laughing Kookaburra	Welcome Swallow
Superb Fairy-wren	Yellow-tufted Honeyeater	Red Wattlebird
Pied Currawong	Sulphur-crested Cockatoo	Yellow-faced Honeyeater
Red-browed Finch	Long-billed Corella	Grey Currawong
White-browed Scrubwren	Crimson Rosella	White-throated Treecreeper
Australian Magpie	Striated Pardalote	Galah

Richard Piesse - Birds of Kororoit Creek and Maribyrnong River (both flowing strongly after rain). "Hoping it is not too long before I can return to enjoy the Castlemaine district bush again!"

Little Pied Cormorant	Silver Gull	Australian White Ibis
Little Black Cormorant	Crested Pigeon	Masked Lapwing
Great Cormorant	Sulphur-crested Cockatoo	Great Egret
Darter	Rainbow Lorikeet	Nankeen Night-Heron
Black Swan	Red-rumped Parrot	Straw-necked Ibis
Pacific Black Duck	Superb Fairy-wren	Pacific Gull
Chestnut Teal	Red Wattlebird	Whistling Kite
Australian Wood Duck	Noisy Miner	Galah
Dusky Moorhen	New Holland Honeyeater	Little Corella
Eurasian Coot	Willie Wagtail	Bell Miner
Australasian Swamphen	Australian Magpie	Magpie-lark
White-faced Heron	Little Raven	Welcome Swallow
Little Egret	Grey Butcher-bird (heard)	Red-browed Finch

Rosemary and Peter Turner – a flock of about 15 White-naped Honeyeaters are regularly feeding vigorously in the flowering Blue Mallee Eucalyptus polybractea in Munro Court, often dangling upside down as they seek nectar – avian gymnasts! (see photo below)

Also a clear view of a Brush Bronzewing along Forest Creek at Happy Valley (14th May), an uncommon observation for this area, but recorded here by Ern Perkins on 3/3/15, and three during a Connecting Country survey on 10/5/19.

Marli Wallace (17 May) – On a walk to the Monk, Marli noted very active and noisy bird life in the Clinkers Hill Bushland Reserve: White-throated Tree-creeper, Flame Robin, Weebill, Golden Whistler, Brown Thornbill, Grey Shrike-thrush, Crimson Rosella. "The considerable weeding and replanting of native plants undertaken in years past by Connecting Country might be showing some rewards". At the Monk "there were numerous Scrubwrens and Flame Robins".



One of Peter and Rosemary Turner's avian gymnasts (see above).



Anne Harland reports a dozen Flame Robins at Sutton Grange after years of not seeing any.



Whistling Kite at Guildford Claire Morgan

Observations – Photo gallery



Soldier Beetles Chauliognathus tricolor Jill Williams



Horse-dropping Fungus

Pisolithus sp.

Jill Williams



Bird's Nest Fungus

Cyathus sp.

Sue Teltscher



Rusty-gilled Polypore Gloeophyllum sepiarium Sue Teltscher



Fly Agaric

Amanita muscaria

Peter Turner



Fly Agaric Amanita muscaria Judy Hopley



Spectacular Rustgill Gymnopilis junonius Marli Wallace



Red-tipped Greenhood Pterostylis rubescens Geraldine Harris



Midge Orchid (Goldfields)

Corunastylis clivicola

Geraldine Harris



Nodding Greenhood Pterostylis nutans basal rosette leaves Marli Wallace



Bushy Needlewood

Hakea decurrens

Marli Wallace



Creeping Mistletoe

Muellerana eucalyptoides
on a Long-leaf Box
Geraldine Harris

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club

Castlemaine Field Naturalists Club

COMING EVENTS

Monthly meetings are being held by zoom during the coronavirus pandemic. Details for joining the meetings will be forwarded by email. The main speaker will follow the usual "Observations" session where members can share their recent interesting sightings (with an option to show a photo).

Fri Jun 12: Prof Phil Batterham (University of Melbourne), "Solutions to Insect Armageddon"

Fri Jul 10: Elizabeth Newton (Trust for Nature), "The importance of the VBA for recording our observations"

Fri Aug 14: Geoff Williams (Platypus Conservancy), "Platypus Conservation"

Fri Sep 11: Lana Austin (Monash University), "Genetics of the Eastern Yellow Robin"

2020 COMMITTEE

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Committee: George Broadway 5472 2513

Euan Moore 0407 519 091 Richard Piesse 0448 572 867

Club website (Webmaster: Ron Wescott) http://castlemainefnc.wordpress.com/

MEMBERSHIP

Please check that your membership is up to date. This issue of the newsletter is the last one if membership is not renewed by 30th June.

Membership forms (available from the CFNC website) can be mailed with cheque to the Treasurer, or completed with details of direct payment into the CFNC account (details on the renewal form), or scanned and mailed or emailed to castlemainefnc@hotmail.com

Subscriptions for 2020

Ordinary membership: Single \$35, Family \$50 Pensioner or student: Single \$25, Family \$30

Subscription includes postage of the monthly newsletter, Castlemaine Naturalist

NEWSLETTER

Deadline for the July issue of the "Castlemaine Naturalist": **26th of June**. Email newsletter material to: newsletter.cfnc@gmail.com

Castlemaine Field Naturalists Club Inc. PO Box 324, Castlemaine, 3450. Inc #A0003010B